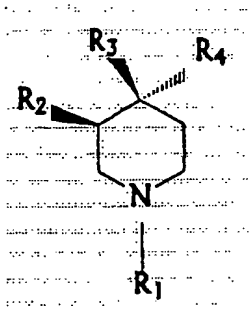
WHAT IS CLAIMED IS:

1. A compound of formula (I):



(I)

wherein R_1 is a hydrogen; linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkyiaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, and hydroxyl; R_2 and R_4 are, independently, linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)-R', wherein R' is linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic

ring or connected to the aromatic ring by a C_1-C_5 alkyl; primary, secondary or tertiary (C_1-C_7)alcohol, C(O)OR" wherein R" is a linear (C_1 -C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)OR"' wherein R"' is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)NH-R"" or NHC(O)-R"" wherein R"" is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_3-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; and

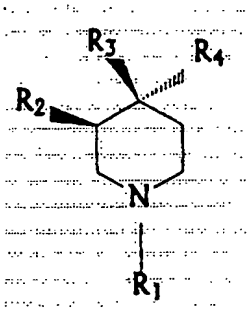
R_3 is F, Cl, Br, I, OH, OR"" or OC=OR"", wherein R"" is an alkyl, aryl, aromatic ring containing one or more hetero atoms, or R_3 is a covalent bond replacing the hydrogen in a hydroxyl group of R_2 when R_2 is alcohol or hydroxyl.

2. A compound selected from the group consisting of 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-1-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-

(2,4-ichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-[Hydroxy(4methylphenyl)methyl]-1-methyl-4-(4-methylphenyl)piperidin-4-ol; 4-(3,4-dichlorophenyl)-3-[(3,4-dichlorophenyl) hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4- dichlorophenyl) hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza-1,5 bis(4-methylphenyl)- 8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone; 4-chlorophenyl 4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone.

3. A method of treatment for a subject having a condition selected from the group consisting of cocaine abuse, depression, anxiety, an eating disorder, alcoholism, chronic pain, obsessive compulsive disorder and Parkinson's Disease, wherein the method comprises administering to the subject a therapeutic dose of one or more of the compounds of claim 1.

4. A method of inhibiting cocaine action in a subject in need of such inhibition comprising administering to a subject an effective amount of a compound of formula (I):



(I)

wherein R_1 is a hydrogen; linear (C_1 -C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, and hydroxyl; R_2 and R_4 are, independently, linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)-R', wherein R' is linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; primary, secondary or tertiary (C_1-C_7) alcohol, C(O)OR" wherein R" is a linear (C_1-C_7) alkyl, branched or cyclic

(C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)OR''' wherein R''' is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_3-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)NH-R'''' or NHC(O)-R'''' wherein R'''' is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; and R_3 is F, Cl, Br, I, OH, OR''''' or OC=OR'''''', wherein R''''' is an alkyl, aryl, aromatic ring containing one or more hetero atoms, or R_3 is a covalent bond replacing the hydrogen in a hydroxyl group of R_2 when R_2 is alcohol or hydroxyl.

5. The method of claim 4, wherein said compound is 4-hydroxy-l-methyl-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone or an analog thereof.

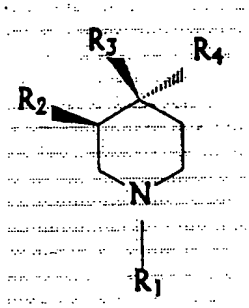
6. The method of claim 4, wherein said compound is a (+)- or (-)-enantiomer of
4- hydroxy-l-methyl-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone or of an analog thereof.

7. The method of claim 4, wherein said compound is selected from the group consisting of 3,4-dichlorophenyl
4-(3,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-(2,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-[hydroxyl4-methylphenyl) methyl]-1-methyl-4-(4-methylphenyl)piperidin-4-ol; 4-(3, 4-dichlorophenyl)-3 - [(3 ,4-dichlorophenyl)hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4-dichlorophenyl)hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza-l,5bis(4-methylphenyl)-8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl) -4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone; 4-chlorophenyl 4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-1-(3 -phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone.

8. The method of claim 4, wherein said compound is the (-)- or (+)-enantiomer of the compound 3,4-dimethylphenyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone or of an analog thereof.

9. The method of claim 4, wherein said compound is the (+)- or (-)-enatiomer of the compound 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone or of an analog thereof.

10. A method of control of dopamine flow in a subject in need of such control comprising administering to said subject an effective amount of a compound of formula (I):



(I)

wherein R_1 is a hydrogen; linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, and hydroxyl; R_2 and R_4 are, independently, linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)-R', wherein R' is linear (C_1 -C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear

alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_3-C_5 alkyl; primary, secondary or tertiary (C_1-C_7) alcohol, C(O)OR" wherein R" is a linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_3-C_5 alkyl; C(O)OR"' wherein R"' is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_3-C_5 alkyl; C(O)NH-R"" or NHC(O)-R"" wherein R"" is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, vitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1 -C_5 alkyl; and R_3 is F, C_1, Br, L, OH, OR"'" or OC=OR"'", wherein R"'" is an alkyl, aryl, aromatic ring containing

one or more hetero atoms, or R_3 is a covalent bond replacing the hydrogen in a hydroxyl group of R_2 when R_2 is alcohol or hydroxyl.

11. The method of claim 10, wherein said compound is 4-hydroxy-l-methyl-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone or an analog thereof.

12. The method of claim 10, wherein said compound is a the (+)- or (-)-enantiomer of the compound 4-hydroxy-1-methyl-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone or of an analog thereof.

13. The method of claim 10, wherein said compound is selected from the group consisting of: 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-(2,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3- [hydroxyl4-methylphenyl)methyl]-1-methyl-4-(4-methylphenyl)piperidin-4-ol; 4-(3,4-dichlorophenyl)-3-[(3, 4-dichlorophenyl)hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4-dichlorophenyl)hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza- 1, Sbis(4-methylphenyl)-8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-:methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone; 4-chlorophenyl 4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-pi;peridyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-]piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-

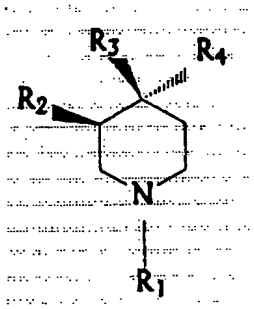
hydroxy-1-(3-phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone.

14. The method of claim 10, wherein said compound is the (+)- or (-)-enatiomer of the compound 3,4-dimethylphenyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone or of an analog thereof.

15. The method of claim 10, wherein said compound is the (+)- or (-)-enatiomer of compound 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone or of an analog thereof.

16. A method of treatment for a subject having a neurological disorder selected from the group consisting of cocaine abuse, depression, anxiety, eating disorders, alcoholism, chronic pain, obsessive compulsive disorder and Parkinson's Disease, the method comprising administering to the subject a therapeutic dose of one or more of the compounds of claim 10.

17. A method of modulating dopamine reuptake action in a subject in need of such action comprising administering to said subject an effective amount of a compound of formula (I):



(I)

wherein R_1 is a hydrogen; linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted

with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, and hydroxyl; R_2 and R_4 are, independently, linear (C_1-C_7) alkyl; branched or cyclic (C_3-C_7) alkyl; halogenated linear, branched or cyclic alkyl; aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl; an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)-R', wherein R' is linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; primary, secondary or tertiary (C_1-C_7)alcohol, C(O)OR" wherein R" is a linear (C_1 -C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)OR"' wherein R"' is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1 -C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally

substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; C(O)NH-R"" or NHC(O)-R"" wherein R"" is a hydrogen, linear (C_1-C_7) alkyl, branched or cyclic (C_3-C_7) alkyl, halogenated linear, branched or cyclic alkyl, aryl or alkylaryl, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aryl or alkylaryl or connected to the aryl or alkylaryl by a C_1-C_5 alkyl, or an aromatic ring containing one or more hetero atoms selected from N, S, and O, optionally substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, linear alkyl, nitro, alkoxyl, hydroxyl, and an amino group directly linked to the aromatic ring or connected to the aromatic ring by a C_1-C_5 alkyl; and

R_3 is F, Cl, Br, I, OH, OR"" or OC=OR"", wherein R"" is an alkyl, aryl, aromatic ring containing one or more hetero atoms, or R_3 is a covalent bond replacing the hydrogen in a hydroxyl group of R_2 when R_2 is alcohol or hydroxyl.

18. The method of claim 17, wherein said compound is selected from the group consisting of 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-(2,4-dichlorophenyl)-4-hydroxy-1-methyl-3-piperidyl ketone; 3- [hydroxy(4-methylphenyl)methyl] -1 -methyl-4-(4-methylphenyl)piperidin-4-ol; 4-(3,4-dichlorophenyl)-3- [(3, 4-dichlorophenyl)hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4-dichlorophenyl)hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza-1, Sbis(4-methylphenyl)-8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-

methylphenyl ketone; 4-chlorophenyl 4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichiorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-1-(3-phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone.

19. The method of claim 17 wherein said compound is the (+)- or (-)-enatiomer of the compound 3,4-dimethylphenyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone or of an analog thereof.

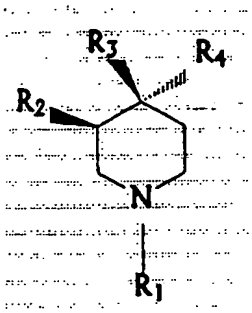
20. A composition comprising one or more compounds selected from the group consisting of 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-(2,4-dichlorophenyl)-4-hydroxy-1-methyl-3-piperi dylketone; 3- [hydroxy(4-methylphenyl)methyl] -1 -methyl-4-(4-methylphenyl)piperidin-4-ol; 4-(3,4-dichlorophenyl)-3- [(3, 4-dichlorophenyl)hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4-dichlorophenyl)hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza-1, 5bis(4-methylphenyl)-8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone; 4-chlorophenyl4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-

phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone in a pharmaceutically acceptable carrier.

21. A method of treatment for a subject having a neurological disorder, said method comprising administering to the subject a therapeutic dose of one or more compounds selected from the group consisting of 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-(2,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3- [hydroxy(4-methylphenyl)methyl] -1 -methyl-4-(4-methylphenyl) piperidin-4-ol; 4-(3,4-dichlorophenyl)-3- [(3, 4-dichlorophenyl)hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4-dichlorophenyl)hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza-1, 5bis(4-methylphenyl)-8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl 4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone; 4-chlorophenyl 4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone in a pharmaceutically acceptable carrier.

22. A method of treatment for a subject having a neurological disorder, said method comprising administering to the subject a therapeutic dose of one or more compounds selected from the (+)- or (-)- enatiomer of the group consisting of the 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2,4-dichlorophenyl 4-(2,4-dichlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-[hydroxy(4-methylphenyl) methyl]-1-methyl-4-(4-methylphenyl)piperidin-4-ol; 4-(3,4-dichlorophenyl)-3- [(3, 4-dichlorophenyl)hydroxymethyl)]-1-methylpiperidin-4o1; 4-(2,4-dichlorophenyl)-3-[(2,4-dichlorophenyl)hydroxymethyl]-1-methylpiperidin-4-ol; 8-aza-1, 5bis(4-methylphenyl)-8-methyl-2,4-dioxabicyclo[4,4,0]decan-3-one; 4-chloro-3-methylacetophenone; 4-chloro-3-methyl phenacylchloride; 4-chlorophenyl 4-(4-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-hydroxy-4-(4-iodophenyl)-1-methyl-3-piperidyl 4-iodophenyl ketone; 4-ethylphenyl 4-(4-ethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 2-chlorophenyl 4-(2-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3-chlorophenyl 4-(3-chlorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-difluorophenyl 4-(3,4-difluorophenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 3,4-dimethyl 4-(3,4-dimethylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 4-chloro-3-methylphenyl4-(4-chloro-3-methylphenyl)-4-hydroxy-l-methyl-3-piperidyl ketone; 1-ethyl-4-hydroxy-4-(4-methylphenyl)-3-piperidyl 4-methylphenyl ketone; 4-chlorophenyl 4-(4-chlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-1-ethyl-4-hydroxy-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(2-phenylethyl)-3-piperidyl ketone; 3,4-dichlorophenyl 4-(3,4-dichlorophenyl)-4-hydroxy-1-(3-phenylpropyl)-3-piperidyl ketone; and 4-bromophenyl 4-(4-bromophenyl)-4-hydroxy-l-(3-phenylpropyl)-3-piperidyl ketone in a pharmaceutically acceptable carrier.

23. A compound of formula (I):



(I)

wherein R, is methyl, ethyl, 2-phenyl-ethyl or 3-phenyl-propyl; R_2 is -C(O)-R"or -CHOH-R" wherein R" is 4-methyl-phenyl, 4-ethyl-phenyl, 3,4-dimethyl-phenyl, 3,4-difluoro-phenyl, 2-chloro-phenyl, 3-chloro-phenyl, 4-chloro-phenyl, 2,4-dichlorophenyl, 3,4-dichloro-phenyl, 4-bromo-phenyl or 4-iodo-phenyl; R_3 is hydroxy; and R_4 is 4 methyl-phenyl, 4-ethyl-phenyl, 3,4-dimethyl-phenyl, 3,4-difluoro-phenyl, 2-chloro-phenyl, 3-chloro-phenyl, 4-chloro-phenyl, 2,4-dichloro-phenyl; with the proviso that R^1 cannot be 4-methyl-pheny when R_1 is methyl and R_4 is 4-methyl-phenyl.

24. A method of treatment for a subject having a condition selected from the group consisting of cocaine abuse, depression, anxiety, an eating disorder, alcoholism, chronic pain, obsessive compulsive disorder and Parkinson's Disease, wherein the method comprises administering to the subject a therapeutic dose of one or more of the compounds of claim 23.